



# Jefferson Lab Alignment Group

## Data Transmittal

**TO:** F. Wesselmann, C. Perdrisat

**DATE:** 08 Oct 2007

**FROM:** J. Dahlberg

**Checked:**

**# :** C1130

**DETAILS:**

Data: Step2b\HallC\HMS\070801a, 070803a, 070803b, 070817a

Below are the results from the survey performed on the HMS hut detectors prior to the GEP-III October 2007 run. A right handed coordinate system was established based on the ideal outgoing beam line from the exit point of the HMS dipole. A +X is to the beam left, a +Z is downstream, and a +Y is up. Values are in millimeters. The individual locations of the four GEP detectors are based on the survey performed on the support frame fiducials prior to installation. Note that variations approaching 1 millimeter were seen on the fiducial points after the detector stack was transferred to Hall C and installed in the HMS hut. Therefore, the accuracy of the survey is estimated to be around 1 millimeter.

**Initial hut survey after the GEP-III focal plane polarimeter frame was installed.**

LOCATION	Z	X	Y
Detector 2 (upst slot)	5728.5	-2.2	16.7
Detector 1 (dnst slot)	6540.9	-15.6	27.3
GEP-III frame	8654.2	-1.7	62.2

**Hut survey after GEP-III detectors installed in frame.**

LOCATION	Z	X	Y
Detector 2 (upst slot)	5730.3	-2.5	16.2
Detector 1 (dnst slot)	6542.8	-15.8	26.3
GEP-III Det. 3A	8061.9	-0.5	59.8
GEP-III Det. 2B	8274.0	-0.8	59.4
GEP-III Det. 1C	9036.2	-2.1	58.7
GEP-III Det. 4D	9248.2	-2.7	58.5
GEP-III frame	8655.1	-1.5	59.1